

NAVAL WAR COLLEGE
Newport, R.I.

**AL QAEDA'S OPERATIONAL CENTER OF GRAVITY:
AS HARD TO FIND AS THE TERRORISTS THEMSELVES?**

by

Michael J. Mallory
Colonel, USA

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: _____

13 May 2002

REPORT DOCUMENTATION PAGE

1. Report Security Classification: UNCLASSIFIED			
2. Security Classification Authority:			
3. Declassification/Downgrading Schedule:			
4. Distribution/Availability of Report: DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.			
5. Name of Performing Organization: JOINT MILITARY OPERATIONS DEPARTMENT			
6. Office Symbol: C		7. Address: NAVAL WAR COLLEGE 686 CUSHING ROAD NEWPORT, RI 02841-1207	
8. Title (Include Security Classification): Al Qaeda's Operational Center of Gravity: As Hard to Find as the Terrorists Themselves?			
9. Personal Authors: Michael J. Mallory, Colonel, USA			
10. Type of Report: FINAL		11. Date of Report: 13 May 2002	
12. Page Count: 26 12A Paper Advisor (if any):			
13. Supplementary Notation: A paper submitted to the Faculty of the NWC in partial satisfaction of the requirements of the JMO Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.			
14. Ten key words that relate to your paper: Operational Warfare; Center of Gravity; Al Qaeda; Terrorism; Wahhabism; Islam			
15. Abstract: The thesis of the paper is: Al Qaeda's Operational Center of Gravity is correctly identifiable by using Operational Warfare's principles and processes. The author uses the terrorist network, Al Qaeda, as an illustration of the process in correctly identifying a center of gravity for a terrorist force, a force not fitting the common definition of a conventional or unconventional operational force. In applying the principles and processes of operational warfare in this analysis, the author first needed to determine the war on terrorism's strategic enemy and that strategic enemy's objective, because it is from the national strategic, or political objective objectives, that operational objectives are derived. In analysis of the strategic enemy, the author postulates that radical Wahhabi Islamic terrorist groups, when viewed in holistically, comprise a strategic threat to this nation. Additionally, the author names this strategic threat, "Adversary," and identifies its strategic center of gravity, as "will of the people, more precisely defined as, radical Wahhabi Islamic fundamentalism. In conclusion, the author states that it turns out that defining Al Qaeda's center of gravity is "easy" relatively speaking, but it is the courses of action deriving from that center of gravity which are hard to define, develop, and execute in defeating not only Al Qaeda, but "Adversary."			
16. Distribution / Availability of Abstract:	Unclassified X	Same As Rpt	DTIC Users
17. Abstract Security Classification: UNCLASSIFIED			
18. Name of Responsible Individual: CHAIRMAN, JOINT MILITARY OPERATIONS DEPARTMENT			
19. Telephone: 841-3556		20. Office Symbol: C	

Security Classification of This Page Unclassified

Thesis

This paper's genesis was driven by the question: Is Al Qaeda's operational center of gravity, as hard to find as the terrorists themselves? The question is derived from the author's interests in two areas: the first, a long term interest in center of gravity concepts; and second, since the 11 September 2001 World Trade Center attack, a professional interest in the most effective ways and means for eliminating Al Qaeda from the world's stage. Thus, this paper's generating base is the author's interests, but also the perceived requirement for military forces needing the correct enemy operational center of gravity before planning and executing operations against it. Therefore, the thesis: Al Qaeda's operational center of gravity is correctly identifiable by using operational warfare's principles and processes.

The Strategic *Adversary* and Its Strategic Objective

Currently, the United States is engaged in an undeclared war against radical Wahhabi Islamic terrorist groups across diplomatic, informational, military, and economic fronts. In the words of President Bush, "We're at war. There has been an act of war declared upon America by terrorists, and we will respond accordingly."ⁱ Albeit, from a conventional view, diplomatic, informational, military, and economic forces are classified as a nation's elements of power, and contextually examined in that light when the state's strategic leadership, considers action or reaction in relation to other states.ⁱⁱ However, in this war, the United States' strategic leadership must take a non-classical and unconventional view of all radical Wahhabi Islamic terrorist groups, considering them as the single strategic adversary.

With these groups viewed as one entity, and labeled for purposes of this paper as the *Adversary*, friendly forces execute operations against enemy forces in the same manner as they do against any other nation state with which conflicts occur: operations based upon objectives derived

from a national strategic objective. Thus, clarity of purpose reigns, operational templates remain in place, and only techniques, tactics, and procedures require adjustment when facing differing enemy operational and tactical forces. Even though many factions, all with their own agendas and objectives may well make up what is termed above as the enemy, the author believes by treating this strategic enemy as a state, one merely lacking physical territory, makes it easier for the United States in conducting this war. Finally, by viewing the *Adversary* as a state, its strategic center of gravity becomes, “will of the people,” although it is more precisely, Wahhabism’s extreme Islamic fundamentalism.

Admittedly, few analysts consider the myriad of radical or fundamentalist Islamic groups as having a monolithic world view,ⁱⁱⁱ but the *Adversary’s* Wahhabi beliefs, “argue for a world in which saved, purified Muslims will have no contact with Christians, Jews, and non- Wahhabi Muslim unbelievers.”^{iv} More importantly, these beliefs are “separatist and supremacist,”^v “violent, intolerant, and fanatical beyond measure.”^{vi} This coalition comprises master terrorists, state sponsors, intelligence chiefs,^{vii} radical fundamentalist clerics, financiers, and others, all theologically motivated in pursuit of world wide “Islamist *jihad*.”^{viii} Yossef Bodansky writes, “Together they wield tremendous power throughout the Muslim world and wreak havoc and devastation upon their foes.”^{ix} Erasing Muslim state boundaries and establishing a single, unified government following the rule of the Caliphs,^x a rule at once both religious and political,^{xi} the author believes, is the enemy’s strategic objective.

There are four main advantages accruing to the United States by combining various radical Islamic groups into one *Adversary*. First, given a single strategic enemy and its objective, makes the task of determining the United States’ national strategic objective easier for the nation’s political leaders. Second, once determined, the national strategic objective provides clarity of national purpose, galvanizes the will of the people, prepares them for the requisite sacrifices in the

war's successful prosecution, and secures their support for the war. Third, the task of determining the theater strategic and operational objective against a single enemy is less complex for the nation's military leaders than multiple theater strategic and operational objectives being the case. Last, planning and conducting the campaigns, major operation, or just a single battle in achieving objectives at the various levels of war are simpler given one strategic enemy versus many. This is especially true for the operational level commander, Commander of the Joint Task Force (CJTF), as explained below.

In planning and executing campaigns against the *Adversary's* operational forces, the CJTF tailors his forces specifically for the fight, conducting operations in the same manner against *sub-adversaries* as he would against conventional foes. In short, the CJTF makes time, space, and force factors work to his advantage, employing greater resources against the enemy's lesser resources, maintaining initiative and momentum across the operational spectrum, defeating the enemy in enemy territory, all within the CJTF's timeline. Importantly, the initiative slips away from the enemy as soon as JTF units deploy into the area of operations, and pressured into planning defenses against JTF attacks instead of attacking targets outside their territory, the enemy quickly loses its operational momentum. More importantly, by constantly leveraging greater JTF technological capabilities, superior technology is a friendly force strength and an enemy force weakness. This is especially true given that the Adversary's forces lack their own technology.

Victor Davis Hanson explains:

“The Taliban and their supporters in the Middle East, like the Ottomans of old, are, to put it plainly, parasitic on Western civilization. A bin Laden can kill Americans only through terror, stealth, Western technology, and familiarity with American culture. Cell phones, the Internet, frequent-flier miles, and Boeing 767 pilot lessons are not indigenous to the to the Middle East.”^{xii}

Finally, two other significant weaknesses plague the enemy, one internal and one external.

The *Adversary's* significant internal weakness is that its strategic objective is based solely on its religious ideal, Wahhabism. In the same manner as a conventional state, it seeks attainment of

its strategic objective through the ways and means best suited in bringing about that end.

However, unlike a conventional state's possessing differing ways and means of attaining its strategic objective, the *Adversary's* only means is terrorism and defeating that terrorism signals its defeat. Also, since its terrorism is manifested through the actions of its terrorist groups, destroying those terrorist groups, without doubt, is CJTF's sole objective.

The *Adversary's* significant external weakness is a United States' strength. In deeming all radical Wahhabi Islamic terrorist groups as one strategic foe, the United States not only focuses on *Adversary's* defeat by concentrating all national energy toward one "strategic" entity, but also protects its strategic center of gravity, the "national will." In essence, by directing national energy is against the "big" enemy and not diffusing it among many "small" enemies, the United States' people perceive only one single enemy whose defeat resolves the problem; therefore, they retain the national will to defeat that enemy. In World War Two, many nations made up the Axis Powers, but "totalitarianism" was viewed as the singular strategic and overarching Axis evil, inherent in all enemies and this nation focused its fight against it. That same idea, the author submits, is just as important in 2002 as it was in 1942.

The National Strategic Objective and the Operational Level of War

Strategically against the *Adversary*, the United States uses its full war waging capabilities across all required diplomatic, informational, military, and economic fronts, employing those capabilities, as needed, across the operational spectrum. President Bush's statements clearly signal his strategic intention in unconditionally fighting the enemy:

"Americans are asking, how will we fight and win this war? We will direct every resource at our command, every means of diplomacy, every tool of intelligence, every instrument of law enforcement, every financial influence, and every necessary weapon of war, to disruption and to the defeat of the global terror network."^{xiii}

Moreover, at the national strategic level, the President established this conflict's parameters when he committed our nation to a strategy of "absolute victory" over the *Adversary*, "Our war on terror begins with Al Qaeda, but it does not end there. It will not end until every terrorist group of global reach has been found, stopped, and defeated."^{xiv} Reinforcing his views, the President further explains how he perceives the rest of the world's participation in this conflict, "Either you are with us, or you are with the terrorists."^{xv}

Clearly, for both the national and international observer and the enemy, the President broadcast his objective of defeating every terrorist group of global reach. The importance of this political objective is paramount, and it cannot be understated. "The single most important decision of the national or alliance/coalition political leadership is determine the *political objective* for the planned use of military and nonmilitary sources of power."^{xvi} With the above decision of the national strategic, or political, objective by the President, the action required for translating that stated objective into operational objectives and campaigns, falls into the operational warfare realm for resolution.

The mission of the operational artist is translating the national strategic to the operational objective, and then discerning those requirements that must be accomplished at the operational level in attainment of the political objective. To do this, the operational planner: first, takes the given political or theater strategic objective and derives the required operational objective; second, taking the operational objective and after analyzing the enemy's critical strengths, he derives the corresponding center of gravity required for achieving that operational objective; and third, by determining the right mixture of national power sources required in defeating or neutralizing the enemy's center of gravity, thereby achieves that operational objective through planning and execution of operational campaigns.

Thus, the correct linkage of strategic to operational objective, along with the correct mix of national power sources against the corresponding center of gravity, leads to operational success.

Operational success, in turn, leads to strategic success, as long as, those objectives are both correctly identified and linked at the planning sequence's start. Conversely, if linkage is absent from the operational to the strategic objective, and/or there is incorrect mix of national power sources applied in pursuing that objective, one may be unsuccessful at one or both levels of war. Additionally, if objectives are incorrectly identified, one faces a grave risk of achieving operational success but failing strategic success, or worse yet, failing objective attainment at both levels of war.

A nation experiencing operational success without strategic success, or failures at both levels of war, faces a failure of national will, its national strategic center of gravity. If this nation experiences failure of will, it is open to defeat, regardless of its strengths and *Adversary's* weaknesses. Illustrating the above in relation to the nation's strategic failure in Vietnam, Harry G. Summers writes, “‘You know you never defeated us on the battlefield,’ said the American colonel. The North Vietnamese colonel pondered this remark for a moment. ‘That may be so,’ he replied, ‘but it is also irrelevant.’”^{xvii}

Therefore, since linking the operational to the strategic objective is, perhaps the crucial factor for shaping success and precluding failure, then victory's key rests in the act of correctly selecting the operational objective, what one might deem as the “initial” element in operational art. Once selected, what one might deem as the “essential” element in operational art comes into play, correctly identifying that objective's corresponding center of gravity. Succinctly stated in Army Field Manual 3-0, Operations: “The center of gravity is a vital analytical tool in the design of campaigns and major operations. Once identified, it becomes the focus of the commander's intent and operational design.”^{xviii}

Thus, in the current war against *Adversary's* operational forces, pursuing operational and eventually strategic success requires paying the most careful attention in selecting a *sub-adversary's* operational center of gravity. Also, the operational planner must make certain the

center of gravity corresponds to the identified objective, often confusing at the operational level of war. Milan N. Vego solidifies the point:

“A common error is to confuse operational objectives with the corresponding center of gravity. The result is a flawed plan that leads to the wastes of resources and time, even when one’s forces enjoy superiority over the enemy forces. Focus on the objectives instead of on the enemy’s operational center of gravity will invariably result in unnecessary losses in personnel, materiel, and time.”^{xxix}

In the war against the *Adversary*, defeating its operational forces (terrorist groups) is the key to the United States’ strategic victory. Therefore, the operational artist must correctly select the operational objective and its corresponding center of gravity for that operational force. The following illustration demonstrates operational warfare’s initial and essential steps in determining the objective and correct identification of Al Qaeda’s center of gravity.

Al Qaeda’s Operational Center of Gravity

Al Qaeda, translated is, “the base.”^{xxx} Originally and literally, “the base” was merely Osama bin Ladens’ documentation of people who traveled to or trained at the Afghanistan training camps he built. In Usama bin Laden’s al- Qaida: Profile of a Terrorist Network, Yonah Alexander and Michael S. Swetnam, state:

“Around 1988, bin Laden realized that it was necessary to keep a documentation of the people who traveled through his ‘guesthouse,’ his camps, and Afghanistan. He wanted to be able to track friends and fellow mujahadeen fighters as well as to be able to give answers to families with missing loved ones and friends who were out of touch. The network became known as ‘al- Qaida’ (or ‘the base’).”^{xxxi}

Today, Al Qaeda is an international ideological and operational network,^{xxii} although its exact structure and membership is, at best, speculative.^{xxiii} Additionally, Al Qaeda, according to Roland Jacquard, is comprised of two circles, the inner circle and the outer circle.^{xxiv} The inner circle, “limited to a number of loyal followers that can be counted on one hand.” The outer circle, “peopled by tens of thousands of militants.”^{xxv} Paradoxically, the handful of bin Laden’s inner

circle is in the open, while the tens of thousands in the outer circle remain in the shadows,^{xxvi}

directly or indirectly, supporting his organization, ideology, and objective.^{xxvii}

Al Qaeda organizational structure is speculative, but the following are facts, not assumptions. First, Osama Bin Laden is Al Qaeda's founder and charismatic leader, whose location since Afghanistan's Taliban government fell is unknown. Also, there are some questions among both government and press officials, as to whether or not Osama bin Laden remains alive. Second, Al Qaeda's organizational structure is comprised of seven elements: a command and control node; a *majlis al shura*, or consultation council; a military committee; a business committee; a *fatwah* or religious committee; a media committee; and even a travel office.^{xxviii} Third, Al Qaeda operates in a minimum of 55 countries spread over six main areas of operations: Middle East, Asia, Europe, Former Soviet Union, Africa, and North and South America.^{xxix} And fourth, capabilities include bombings, hijacking, kidnapping, assassination, suicide attacks, and attempts to attain weapons of mass destruction.^{xxx}

In contrast to its organization, Al Qaeda's ideology is well known and disseminated. Often it is Osama bin Laden who personally delivers his message via videotaped speeches to both Al Qaeda's faithful, and the general public. First, the group opposes all nations and institutions not governed in consonance with its interpretation of Islam. Second, it opposes any United States military presence in the Middle East. Third, it endorses the killing of all Americans, civilians included, anywhere in the world where Americans are located. Fourth, Al Qaeda endorses the *fatwah* (religious ruling) calling for a Jihad against the United States and its allies. Fifth, the group endorses the *fatwah* calling for a Jihad against the United States and Saudi Arabia. And sixth, Osama bin Laden himself declares that it is the duty of all Muslims to attack the enemies of God with as much force as possible.^{xxxi}

Al Qaeda's stated objective is straightforward: unite all Muslims and establish a government following the rule of the Caliphs, including erasing Muslim state boundaries and replacing all of

them with a single Caliph government.^{xxxii} Importantly, and in consonance with operational warfare tenants, Al Qaeda's operational objective is linked to *Adversary's* strategic objective, rule of the Caliphs.^{xxxiii}

Al Qaeda's stated objective is not surprising given that its leader, Osama bin Laden was born a Saudi, is an adherent of Wahhabi Islam,^{xxxiv} the official theology of the Gulf states^{xxxv} and Saudi Arabia's royal family.^{xxxvi} The same royal family that conveyed "special status" on bin Laden's father and family.^{xxxvii} Finally, in attaining this objective, Al Qaeda's sequencing of operational actions, its "ways" to its "end," looks to remove both its enemies, the United States and the House of al-Saud, through imposing unacceptable costs on the United States, forcing us from Saudi Arabia, thereby abandoning our allies.^{xxxviii}

There are a myriad of reasons for Al Qaeda's operational objective and ideology, ranging from the radical religious Islamic world-view of an "inevitable and violent clash with the U.S.-led West," a clash between Dar al-Islam (The Realm of Islam) and Dar al- Harb (The Realm of War)^{xxxix} at one end of the continuum, to a political Islamic world-view at the other end of the continuum, their "need to restore lost power,"^{xl} power relentlessly eroding since the Crusades and Christian reconquest of Spain.^{xli} Also, the nation-state framework of today's political environment is not a Muslim view, but a Western view.

Traditionally, Muslims view the world two ways. First, from a supranational perspective, a "Muslim Nation," expressed through what Bodansky explains is, "pan-Islamism"; and second, from a sub-national, or one's blood relations and extended family.^{xlii} The nation-state concept is not traditionally or historically Muslim, but a post World War One European framework forced upon the Muslim world by Great Britain and France.^{xliii}

Additionally, sandwiched between these religious and political continuum extremes, are the anti-Western and anti-American reasons for Al Qaeda's ideology, the cultural reasons. Islamic fundamentalists blame "American-originated" changes, for "wrecking a traditional social fabric

without putting anything in its place that offers self-respect and stability, or even—for most Muslims—a more prosperous life.”^{xliv} In Bodansky’s words, “Today this crisis is escalating because of the widening gap between the West and the Muslim world and the intensifying exposure of the Muslim world to Western Civilization through electronic media—from satellite TV to the Internet. The Islamists consider this exposure an onslaught against their way of life, a constant and flagrant reminder of backward Islam’s failures in science and technology.”^{xlv} Thus, for a myriad of reasons and perceptions falling onto the continuum between religion and politics, with significant cultural influences falling in between, Al Qaeda conducts operations against the West to achieve its stated objective.

In pursuit of its operational objective, Al Qaeda’s “means” to its “end” is terrorism. Moreover, Al Qaeda’s use of terrorism is strengthened by the 1968 *jihad* of Sheikh Muhammad Abu-Zahra, defining terrorism as an acceptable means of fighting the superior forces of Islamic opponents.^{xlvi} Armed by this *jihad*, Al Qaeda’s 11 September 2001 attack against the World Trade Center is the most egregious to date, but not Al Qaeda’s only successful terrorist attacks since Osama bin Laden turned his back on Saudi Arabia in 1994 after being stripped of his Saudi citizenship.^{xlvii} Al Qaeda is the prime suspect in the bombings of U.S. military barracks in Saudi Arabia, embassies in Africa, and the U.S.S. Cole,^{xlviii} among other terrorist attacks and operations, as well as seeking weapons of mass destruction,^{xlix} including “uranium packed devices that spread radiation over a wide area and cause panic,”^l the “dirty bomb.”^{li} Finally, Al Qaeda is responsible for financing and training thousands of Islamic “volunteers,” today fighting all over the world:^{lii} Indonesia, Somalia, the Philippines, Bosnia, Kosovo, the Middle East, Chechnya, Europe, and the United States. There are even those who claim Al Qaeda has ties to the Oklahoma City bombings in 1995.^{liii}

However, it is not its past terrorist attacks and other operations concerning most counterterrorists today, it is Al Qaeda’s operational and Osama bin Laden leadership

methodologies. Paul R. Pillar cites two global developments that, “shaped the face of modern international terrorism and how terrorists operate,”^{liv} those developments are, first, “the diffusion of modern information technology and advanced communications,”^{lv} and second, “is increased movement, and ease of movement across international boundaries.”^{lvi}

In the first instance, information technology and advanced communications help terrorists just as they help legitimate businesses, by improving the efficiency and effectiveness of all their activities.^{lvii} In the second instance, ease of movement across international boundaries, the mass of people traveling daily all over the globe, makes it easier for terrorists to enter and leave nations, and harder for legitimate authorities to track them.^{lviii}

Al Qaeda plainly uses the above in increasing its operational capabilities. An expert in Internet technology, quoted in a recent Washington Times article: “Internet communications have become the main communications system among Al Qaeda around the world because it is safer, easier, and more anonymous if they take the right precautions and I think they are doing that.”^{lix} As for its use of other advanced communications, Osama bin Laden uses his satellite phone so extensively, that on August 20, 1998 it nearly killed him when U.S forces used his satellite phone transmissions to locate him and then fire Tomahawk cruise missiles into one the camp he was at, reportedly barley missing him in the attack.^{lx} Since then, Osama bin Laden instituted satellite phone protocols designed to preclude such threats. He uses domesticated falcons with thirty-four centimeter antenna attached to them. As the birds fly, Al Qaeda uses its satellite phones, but the transmissions prove nearly untraceable.^{lxi}

Along with information technology and advanced communications, other Al Qaeda “critical strengths” are: its worldwide, diversified and legal, transnational, legitimate “front” corporations and businesses. These companies earn profits and reinvest in varied other legitimate enterprises, in the same way as millions of other businesses operate. Estimates of legitimate funds deposited throughout the world are eye opening: in Sudan and Yemen, an estimated \$700 million; estimates

of nearly \$100 million in Caribbean banks; \$600 million deposited in the rest of the West, Europe and the United States; along with an estimated \$200 million in Kuwaiti banks, with another \$600 in legal holdings in the rest of the Gulf States.^{lxii}

Illegally, Al Qaeda amasses over one billion dollars annually on drug activities, including laundering money for the Russian Mafia^{lxiii} and other illegal organizations, plus the monetary gains it gleans from activities ranging from bribery and extortion, to donations from “sponsors” paying for Al Qaeda not setting up cells in their nations.^{lxiv} Additionally, it supports a growing number of Islamic fundamentalist charities, building popular support throughout the Muslim world, through providing food, shelter, medical supplies, education, and religious services. However, much of the time, many of these organizations are often used for laundering funds and as safe house locations for terrorists on the move.^{lxv}

Al Qaeda’s last critical strength is its leader, Osama bin Laden. Bodansky states, “Bin Laden is not a man to be ignored, for he is at the core of Islamic international terrorism.”^{lxvi} Further, bin Laden’s organizational and managerial skills cannot be ignored, anymore than can the charismatic effect he has on those supporters in both the inner and outer rings. Finally, his stature in the eyes of “everyday Muslims” is something requiring reckoning because he is seen as a unifying force for Islamic world. Moreover, he is perceived as the one man capable of setting Islam back on its historical timeline, restoring its roots.^{lxvii} Even if he does not accomplish the mission, supporters throughout the Muslim world believe Islamic restoration is inevitable primarily due to his efforts. Significantly, the name “Osama,” is the second most popular name for male infants in the Muslim world, right after Mohammed.^{lxviii}

At this juncture, having both the operational objective and, based on that objective, Al Qaeda’s critical strengths, the next step is determining the center of gravity. Further, since center of gravity is only derived from critical strengths,^{lxix} determination of Al Qaeda’s center of gravity

must derive from advanced communications, information technology, legal and illegal financial networks and organization, its leader, or a combination of the above.

One obvious factor stands out among the above critical strengths: even though information technology and advanced communication are critical strengths of Al Qaeda, they are distinctly subject to direct and indirect attack. Moreover, upon closer examination, looking at these two critical strengths in composite, one is justified in making the operational leap that there are implied capabilities additive to these two strengths, making them more of a “system” than just a satellite phone or a computer work station.

Additionally, Al Qaeda is well known for its use of advanced information technology, so it is probable that this system also interfaces, in some degree, with its finance and logistic organization and elements, along the lines of the U.S. military’s planned Global Command Support System (GCSS), although probably not to that level of sophistication. However, for this paper, this system is labeled, “C2F,” for “Command and Control and Finance (Logistics) System.”^{lxx} Further, C2F appears as the best Al Qaeda’s center of gravity candidate. Therefore, the next step in this center of gravity determination is validation or invalidation.

In identifying C2F as Al Qaeda’s center of gravity, one uses a center of gravity definition and a logical methodology in the validation process. In this case, although there are many center of gravity definitions, Vego’s from Operational Warfare is the best modern definition. So, “That source of massed strength—physical or moral, or a source of leverage—whose serious degradation, dislocation, neutralization, or destruction would have the most decisive impact on the enemy’s or one’s own ability to accomplish a given military objective,”^{lxxi} serves as the first element of the validation process.

As for the second element required in the validation process, a logical methodology, the method postulated by William W. Mendel and Lamar Tooke, is best:

“If I desire to impose my will upon this center of gravity, will that action create a

cascading, deteriorating effect on morale, cohesion, and will to fight that prevents my enemy from achieving his aims and allows the achievement of my own? Further, if I have selected a valid center of gravity, do I have a feasible ability to impose my will over it?”^{lxxii}

The authors continue, “If the answer to both questions is yes, then a valid center of gravity has been established.”^{lxxiii} With regard to C2F, the answer to both validation questions is in the affirmative, and therefore, C2F is confirmed as Al Qaeda’s center of gravity.

The following is supporting rationale for C2F being Al Qaeda’s center of gravity. First, by using advanced information technology, C2F provides not just command, control, and operational communication, but supports finance, logistics, technical intelligence gathering (from the Internet and HUMINT reporting back through Internet sources), non-operational communications and information dissemination, etc.; clearly, Al Qaeda operates as do other network-centric organizations.^{lxxiv} Second, the group’s success or failure depends on speed of command (superior information position turned into competitive advantage) and self-synchronization (a well informed force organizes and synchronizes complex warfare activities from the bottom up);^{lxxv} so far, Al Qaeda appears successful in its operations. Last, Al Qaeda’s operations illustrate not platform-based,^{lxxvi} but effects-based outcomes: “the massing of effects versus the massing of forces,” “rapid foreclosure of enemy courses of action,” and “offsetting a disadvantage in numbers, technology, or position.”^{lxxvii}

Additionally, C2F is the center of gravity because the other critical strengths do not pass Mendel and Tooke’s methodology. It is not “leadership” because if Osama bin Laden is killed or captured, another leader will take his place, and speculation exists today that this may already be the case. Incorporated into the identified center of gravity, is Al Qaeda’s legal and illegal financial enterprise network, because with C2F’s degradation, defeat or destruction, the finances and what they buy, is neutralized. Finally, as to “classical” centers of gravity, as historically identified: it is not Al Qaeda’s “forces” because they are too weak to attack with any means other than terrorism

and the massing of those effects; it is not “capitol” because Al Qaeda is neither a nation or a state, with no territory nor capitol; it is not “will of the people,” because that is strategic and Al Qaeda is an operational entity, a *sub-adversary*, as defined in this paper. Thus, C2F is Al Qaeda’s operational center of gravity.

CONCLUSIONS

Two questions and their answers: First, in answer to this paper’s title question, Is Al Qaeda’s operational center of gravity, as hard to find as the terrorists themselves? The answer is, “no.” In fact, finding it was not difficult, only time consuming and analysis intensive, just as with nearly every center of gravity identification in this author’s experience over the past dozen years. Second, was the paper’s thesis supported? The answer is, “yes.” Al Qaeda’s operational center of gravity is correctly identifiable by using operational warfare principles and processes. Admittedly, during the early research phase of this paper, there was concern given that Al Qaeda, being a terrorist network and neither a truly conventional or unconventional force by common definition, might prove troublesome. It did not.

This author believes the reason for the above answers is simply because the principles and processes of operational warfare, or operational art, are viable for any opponent with which the nation finds itself at odds. Further, they have stood the test of time, and will continue doing so as long as operational artists continue updating and improving the process, thus far the standard. Finally, in the author’s view, it does not matter if it is a conventional or unconventional foe, operating symmetrically or asymmetrically, using joint forces or single service forces, operational warfare processes work the entire length of conflict’s continuum and at each level of war. If an opponent has even one critical strength, and they all possess at least one, then there is a center of

gravity. However, even if they all have a center of gravity, and its determination process has stood the test of time and continues doing so, “So what?”

The “So what?” is only the first of the tough questions requiring answers from the national leadership, but those answers are hard to find. For instance, given “C2F” is Al Qaeda’s center of gravity, what is the best way to attack it? What is the correct mix of national power sources required? Is it a purely military objective? If so, what forces does the CJTC use? An interagency objective? If so, which agency takes the lead? Validating it by using Mendel and Tooke’s logical methodology, ascertains this nation has feasible ability to overcome it, but are there constraints or restraints encountered that adversely affect achieving that objective? Finally, there are dozens of others, but there are three questions the nation’s leaders without qualification, cannot ignore: “What is our center of gravity? How do we protect it?” Most importantly, “How do we preclude failure of the national will?”

Last point. This terrorism war forces this nation’s leaders, its institutions, and its people to study this conflict far more differently than any other in the national experience. There have been hot wars and cold wars, but this is a “lukewarm” war, with challenges and characteristics from both converging with new and unresolved factors, resulting in a war where old rules do not always work. Perhaps center of gravity identification remains “easy,” but plans and actions based on that "easy" information, only become tougher to determine.

NOTES

- ⁱ President Bush's remarks in a meeting with the National Security Team and an exchange with reporters at Camp David, September 21, 2001, 3.
- ⁱⁱ Milan N. Vego, Operational Warfare, (Newport, RI: Naval War College, United States Navy, 2000), 640.
- ⁱⁱⁱ Paul R. Pillar, Terrorism and U.S. Foreign Policy, (Washington, DC: The Brookings Institution, 2001), 53.
- ^{iv} Stephen Schwartz, Liberation, Not Containment, How to Win the War on Wahhabism, National Review, November 19, 2001, 2 (<http://www.nationalreview.com/comment/comment-schwartz113001.shtml>).
- ^v Ibid., 2.
- ^{vi} Stephen Schwartz, Ground Zero and the Saudi Connection, The Spectator, 22 September 2001, 2-3. (<http://spectator.co.uk/article.php3?table=old§ion=back&issue=2001-09-22&id=...>), [28 March 2002]
- ^{vii} Yossef Bodansky, Bin Laden: The Man Who Declared War on America, (New York, NY: Prima Publishing, 2001), X.
- ^{viii} Ibid., X.
- ^{ix} Ibid., X.
- ^x Yonah Alexander and Michael S. Swetnam, Usama bin Laden's al-Qaida: Profile of a Terrorist Network, (Ardsley, NY: Transnational Publishers, Inc., 2001), 2.
- ^{xi} Bodansky, XVI.
- ^{xii} Victor Davis Hanson, "The Longest War," American Heritage, (March, 2002): 44.
- ^{xiii} President Bush's remarks during his address before a Joint Session of Congress of the United States on the United States response to the terrorist attacks of September 11, 2001 made on September 20, 2001, 3.
- ^{xiv} Ibid., 3.
- ^{xv} President Bush's remarks during his address before a Joint Session of Congress of the United States on the United States response to the terrorist attacks of September 11, 2001 made on September 20, 2001, 3.
- ^{xvi} Vego, 410.
- ^{xvii} H.G. Summers, Jr., On Strategy: A Critical Analysis of the Vietnam War, (Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, 1983), 1.
- ^{xviii} Headquarters, Department of the Army, FM 3-0: Operations (Washington, DC: 14 June 2001), 5-7.
- ^{xix} Ibid., 473.
- ^{xx} Pillar, 54.
- ^{xxi} Alexander and Swetnam, 4.
- ^{xxii} Sue Lackey, The 'New Wahhabi' Movement, MSNBC News, October 17, 2001, (<http://www.msnbc.com/news/643005.asp>), [28 March 2002].
- ^{xxiii} Roland Jacquard, In the Name of Osama Bin Laden, Global Terrorism & the Bin Laden Brotherhood, (Durham, NC and London: Duke University Press, 2002), 100.
- ^{xxiv} Ibid., 100.

^{xxv} Ibid., 100.

^{xxvi} Ibid., 100.

^{xxvii} Steve A. McLaughlin, “The War on Terror with Global Reach: Will an Operational Victory Result in Strategic Defeat?” (Unpublished Research Paper, U.S. Naval War College, Newport, RI: 2002), 9.

^{xxviii} Alexander and Swetnam, 3.

^{xxix} Ibid., 30-31.

^{xxx} Bodansky, XVIII.

^{xxxi} Ibid., 2.

^{xxxii} Ibid., 2.

^{xxxiii} Bodansky, XVI.

^{xxxiv} By Silence Betrayed, US News, October 17, 2001, (<http://www.miraserve.com/pressrev/EN17oct01.htm>), [28 March 2002].

^{xxxv} Stephen Swartz, Ground Zero and the Saudi Connection, The Spectator, 22 September 2002, 3, (<http://www.spectator.co.uk/article.php3?table=old§ion=back&issue=2001-09-22&id=...>), [28 March 2002].

^{xxxvi} By Silence Betrayed, US News, October 17, 2001, (<http://miraserve.com/pressrev/EN17oct01.htm>), [28 March 2002].

^{xxxvii} Bodansky, 3.

^{xxxviii} Natural Selection, Inc., Evolutionary Models of the Terrorist Threat, (La Jolla, CA: 13 June 2000), 24.

^{xxxix} Pillar, 65.

^{xl} Ibid., 66.

^{xli} Ibid., 65.

^{xlii} Bodansky, XII.

^{xliii} Ibid., XII.

^{xliv} Pillar, 64.

^{xlv} Ibid, XVI.

^{xlvi} Bodansky, XIII.

^{xlvii} Jacquard, 5.

^{xlviii} Calabresi and Ratnesar, 37.

^{xlx} Bodansky, 327.

^l Calabresi and Ratnesar, 27.

^{li} Bodansky, 327.

^{lii} Ibid., 35.

^{liii} Dorian Zumel Sicat, Abu Part of Oklahoma Blast, Manila Times, April 2, 2002, (<http://ebird.dtic.mil/Apr2002/e20020402abu.htm>), [2 April 2002]

^{liv} Pillar, 47.

^{lv} Ibid., 47.

^{lvi} Ibid., 48.

^{lvii} Ibid., 48.

^{lviii} Ibid., 48.

^{lix} Dafna Linzer, “Al Qaeda Uses Internet Extensively,” Washington Times. April 22, 2002, (<http://ebird.dtic.mil/Apr2002/e20020422.al.htm>), [22 April 2002].

^{lx} Jacquard, 46.

^{lxi} Ibid., 47.

^{lxii} Bodansky, 314-315.

^{lxiii} Ibid., 315.

^{lxiv} McLaughlin, 9.

^{lxv} Bodansky, 316.

^{lxvi} Ibid., X.

^{lxvii} Ibid., 406.

^{lxviii} McLaughlin, 6.

^{lxix} Vego, 309.

^{lxx} The designation of the term, “C2F,” as Al Qaeda’s center of gravity, was by mutual agreement between CDR Steve McLaughlin, USN and the author, after an intense brainstorming session on 24 April 2002. CDR Steve McLaughlin and the author, are both students at the U.S. Naval War College.

^{lxxi} Vego, 634.

^{lxxii} Mendel and Tooke, 5.

^{lxxiii} Ibid., 5.

^{lxxiv} Clayton D. Saunders, “Al Qaeda: An Example of Network-Centric Operations,” (Unpublished Research Paper, U.S. Naval War College, Newport, RI: 2002), 1.

^{lxxv} Cebrowski and Garstka, 13.

^{lxxvi} Ibid., 2.

^{lxxvii} Ibid., 7.

BIBLIOGRAPHY

- Adcock, F.E. The Greek and Macedonian Art of War. Berkley and Los Angeles, CA: University of California Press, 1957.
- Alexander, Yonah. And Swetnam, Michael S. Usama bin Laden's al-Qaida: Profile of a Terrorist Network.. Ardsley, NY: Transnational Publishers, Inc., 2001.
- Alberts, David S. and Garstka, John J. and Stein, Frederick P. Network Centric Warfare: Developing and Leveraging Information Superiority, 2d ed., (revised). Washington, DC: C4ISR Cooperative Research Program Publication Series, 1999.
- Bodansky, Yossef. Bin Laden: The Man Who Declared War on America. New York, NY: Prima Publishing, 2001.
- Brodie, Bernard. "The Worth Principles of War." Lecture, U.S. Army Command and General Staff College, Fort Leavenworth, KS: 7 March 1957. Reprint, U.S. Naval War College, Joint Military Operations Department, NWC 1057, Newport, RI: 2002.
- Calabresi, Massimo and Ratnesar, Romesh. "Can We Stop the Next Attack?" Time (March 11, 2002): 24-38.
- Cancian, Mark. "Centers of Gravity are a Myth." U.S. Naval Institute Proceedings, 124/9/1147 (September 1998): 30-34.
- Cebrowski, Arthur K. and Garstka, John J. "Network-Centric Warfare: Its Origin and Future." U.S. Naval Institute Proceedings. (January 1998). <<http://www.usni.org/Proceedings/Articles98/PROcebrowski.htm>> [17 April 2002]
- _____. "President's Forum." Naval War College Review, vol. 54, no.2 (Spring 2001), 5-11.
- Clausewitz, Carl Von. On War. Translated and edited by Michael Howard and Peter Parat. Princeton, NJ: Princeton University Press, 1976.

-
- Dahl, Erik J. Network Centric Warfare and the Death of Operational Art. Newport, RI: U.S. Naval War College, Joint Military Operations Department, NWC 1012, 2002.
- Desker, Barry and Ramakrishna, Kumar. "Forging an Indirect Strategy in Southeast Asia." The Washington Quarterly (Spring 2002): 161-176.
- Delbruck, Hans. History of the Art of War, Vol. I, Warfare in Antiquity. Translated by Walter J. Renfro, JR. London and Lincoln, NE: University of Nebraska Press, 1975.
- Department of the Army. Operations. Field Manual 3-0. Washington, DC: June 2001.
- DuVal, David A. "Planning for Counterterrorist Military Operations." Unpublished Research Paper, U.S. Naval War College, Newport, RI: 1989.
- Echevarria, Antulio J. II. "Optimizing Chaos on the Nonlinear Battlefield." Military Review. September 1997. <www-cgsc.army.mil/milrev/English/sepoct97/echevarr.htm> [21 March 2002]
- Ferrill, Arther. The Origins of War: From Stone Age to Alexander the Great. London: Thames and Hudson Ltd. 1985.
- Fishel, John T. "Little Wars, Small Wars, LIC, OOTW, The Gap, and Things that Go Bump in the Night." Low Intensity Conflict & Law Enforcement, Vol. 4, No. 3, (Winter 1995): 372-398. Reprint: 2002. Newport, RI, U.S. Naval War College, Joint Military Operations Department, NWC 3077.
- Frey, Terry C. "Terrorism: Has It Become a Form of Modern Warfare?" Unpublished Research Paper, Air Command and Staff College, Air University, Maxwell AFB, AL: 1986.
- Friedman, George. "No Easy Battle." The Officer (October 2001): 27-28. <<http://proquest.umi.com/pqdweb?Did=000000085888312&Fmt=3&Deli=1&Mtd=1&Idx=...>> [27 March 2002]
- Fogel, David B. Evolutionary Models of the Terrorist Threat. DI-MISC-80711. La Jolla, CA: Natural Selection, Inc., 13 June 2000.
- Ghent, Ralph D. "Issues of the Center of Gravity in Counterinsurgency Operations." Unpublished Research Paper, U.S. Naval War College, Newport, RI: 1997.
- Gordon, Michael R. and Trainor, Bernard E. The Generals' War. Boston, New York, and London: Little, Brown and Company, 1995.
- Hackett, Sir John, ed., Warfare in the Ancient World. New York, Oxford, Sydney: Sidgwick and Jackson, Ltd., 1989.
- Halberstam, David. War in a Time of Peace: Bush, Clinton and the Generals. New York, NY: Simon and Schuster, 2001.

Handel, Michael I. Masters of War: Classical Strategic Thought. London and Portland, OR: Frank Cass, 1992, 1996, 2001.

_____. Who Is Afraid of Carl Von Clausewitz? A Guide to the Perplexed. Newport, RI: U.S. Naval War College, Department of Strategy and Policy, Summer, 1999.

_____. Sun Tzu and Clausewitz: The Art of War and On War Compared, Professional Readings in Military Strategy, No.2. Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 1991.

Hanson, Victor Davis. The Western Way of War: Infantry Battle in Classical Greece. Berkley and Los Angeles, CA: University of California Press, 1989.

_____, ed, Hoplites: The Classical Greek Battle Experience. London and New York, NY: Routledge, 1991.

_____. "The Longest War." American Heritage (March 2002): 36-46.

Helms, Chester A., Captain, USN, U.S. Naval War College, Joint Military Operations Moderator, Newport, RI. Conversation with author, April 2002.

Huntington, Samuel P. The Clash of Civilizations: Remaking of World Order. New York, NY: Touchstone Books, Simon and Schuster, 1996.

_____. "The Lonely Superpower." Foreign Affairs. (March/April 1999).
<<http://proquest.umi.com/pqdweb?TS=1017350958&Did=000000039251420&Fmt=4&Deli...>> [28 March 2002]

Izzo, Lawrence L. "The Center of Gravity is Not an Achilles Heel." Military Review (January 1988): 72-77.

Jenkins, Brian Michael. "Statement," U.S. Congress, Senate, Armed Services Subcommittee on Emerging Threats, Terrorism: Current and Long Term Threats, November 15, 2001. Reprint: Newport, RI: 2002. Naval War College, Joint Military Operations Department, NWC 3093.

Jacquard, Roland. In the Name of Osama Bin Laden. London and Durham, NC: Duke University Press, 2002.

Jomini, Baron Antoine Henri. The Art of War. Philadelphia, PA: J.B. Lippencott & Co., 1862; Reprint, The West Point Military Library, Westport, CT: Greenwood Press, 1995.

Joint Chiefs of Staff. Doctrine for Joint Operations. Joint Pub 3-0. Washington, DC: 10 September 2001.

Joint Military Operations Faculty. Commander's Estimate of the Situation (CES). Newport, RI: U.S. Naval War College, NWC 4111E, 25 March 2002.

Katzman, Kenneth. The Library of Congress, Congressional Research Service, Terrorism: Near Eastern Groups and State Sponsors, 2001, September 10, 2001. Washington, DC: 2001.

Lackey, Sue. "The 'New Wahhabi' Movement." MSNBC. (17 October 2001).
<http://www.msnbc.com/news/643005.asp> [28 March 2002]

Mamdani, Mahmood. "Good Muslim, Bad Muslim – An African Perspective." Essay: Herbert Lehman Professor of Government and Anthropology, Columbia University, New York. <<http://www.ssrc.org/sept11/essays/mamdani.htm>> [28 March 2002]

McLaughlin, Steve A. "The War on Terror with Global Reach: Will An Operational Victory Result in Strategic Defeat." Unpublished Research Paper, U.S. Naval War College, Newport, RI: 2002

Mendel, William W. and Tooke, Lamar. "Operational Logic: Selecting the Center of Gravity." *Military Review* (June 1993): 2-11.

Morgan, Kenneth W. Islam – The Straight Path: Islam Interpreted by Muslims.
http://www.religion-online.org/cgi-bin/relsearchd.d11/showchapter?chapter_id=1642

Pentland, Pat A. "Center of Gravity Analysis and Chaos Theory." Unpublished Research Paper, U.S. Air College, Air University, Maxwell AFB, AL: 1993.

Peters, Ralph. "The New Warrior Class." Parameters (Summer 1994): 16-26.

Peterson, Gary C. "Center of Gravity: A Most Important Concept Mostly Misunderstood." Unpublished Research Paper, U.S. Naval War College, Newport, RI: 1994.

Pillar, Paul R. Terrorism and U.S. Foreign Policy. Washington, D.C.: Brookings Institution Press, 2001.

Saunders, Clayton D. "Al Qaeda: An Example of Network-Centric Operations." Unpublished Research Paper, U.S. Naval War College, Newport, RI: 2002.

Schneider, James J. and Izzo, Lawrence L. "Clausewitz's Elusive Center of Gravity." Parameters (September 1987): 46-57.

Schwartz, Stephen. "Ground Zero and the Saudi Connection." The Spectator. 22 September 2001. <<http://www.spectator.co.uk/article.php3?table=old§ion=back&issue=2001-09-22&id=...>> [28 March 2002]

_____. "Liberation, Not Containment: How to Win the War on Wahhabism." National Review. (19 November 2001). <<http://www.nationalreview.com/comment/Comment-schwartz113001.shtml>> [28 March 2002]

Steward, Daniel N. "Counter Terrorism Joint Task Force: A Paradigm for Counter Narcotics?" Unpublished Research Paper, U.S. Naval War College, Newport, RI: 1994.

Summers, Harry G., JR. On Strategy: A Critical Analysis of the Vietnam War. Novato, CA: Presido Press, 1982.

Swain, Richard M. "Clausewitz, FM100—5, and the Center of Gravity." Military Review (January 1988): 83.

Tranchemontagne, Marc G. "Terrorist Application of Operational Art." Unpublished Research Paper, U.S. Naval War College, Newport, RI: 2001.

Toffler, Alvin and Heidi. War and Anti-War: Survival at the Dawn of the 21st Century. Boston, New York and London: Little, Brown and Company, 1993. Reprint, Newport, RI: 2002. U.S. Naval War College, Joint Military Operations Department, NWC 1019.

Undeland, David K. "Center of Gravity – Use and Misuse." Unpublished Research Paper, U.S. Naval War College, Newport, RI: 2001.

Vego, Milan N. Operational Warfare. Newport, RI: U.S. Naval War College, 2000.

_____. "Wake-Up Call in Kosovo." U.S. Naval Institute Proceedings (October 2000): 66-70.

_____. U.S. Naval War College, Joint Military Operations Faculty Member, Newport, RI, Conversation with author. 1 May 2002.

White, Jeffrey B. "Some Thoughts on Irregular Warfare." Studies in Intelligence, Vol.39, No.5, Center for Studies of Intelligence, Washington, DC: 1996. Reprinted, Newport, RI: 2002. U.S. Naval War College, Joint Military Operations Department, NWC 3060.
